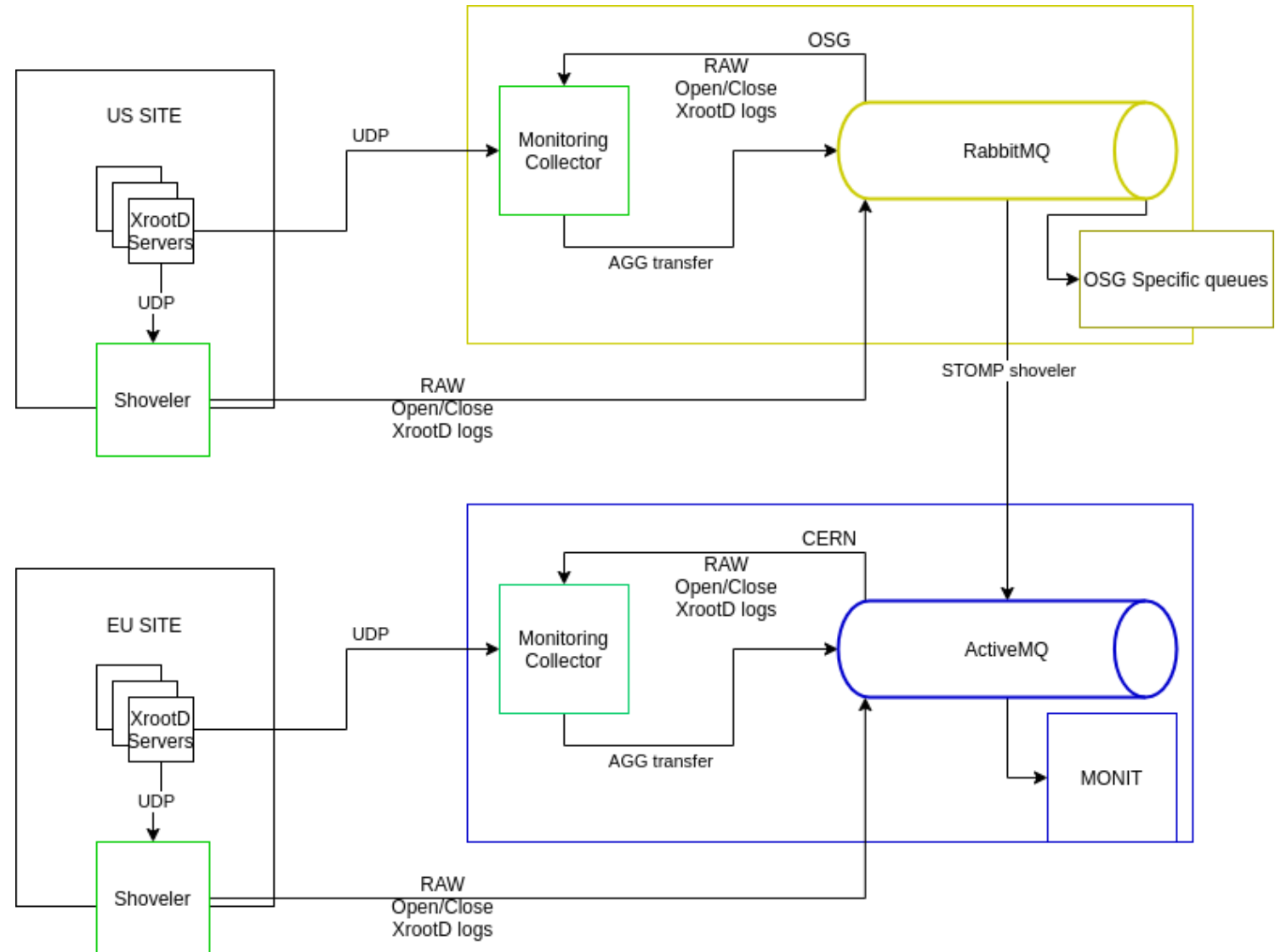# XRootD Monitoring

Discussed infrastructure

- Common components
- OSG specific components
- CERN specific components

Questions:
- Could the shoveler be run/scaled centrally?
  - Will simplify XrootD collector
- Where the data enrichment is done?
  - XrootD event comes with source/destination
  - We need VO and Site

Message formats

- **XrootD RAW:** Events as produced by the XrootD servers
  - XrootD servers need to be configured to send these
    - Directly to the monitoring collector (maybe not needed if we can run a the shoveler as a service)
    - Via UDP shoveler

- **XrootD transfer:** Produced by aggregating transfer events
  - Current agreement only Open/Close events (no Read)
  - Happens on the Monitoring Collector
  - Should contain source/destination and VO

- **Site summary:** Produced by aggregating transfer documents over a time window
  - Requires extra information (site) (enriched using source/destination and VO)
  - Is what's required for Monitoring/Accounting of WLCG
  - Where it happens:
    - GLED: MONIT
    - ALICE: Monalisa
    - New flow: ???

Open Questions

- Could we deploy shovelers centrally?
  - During a transition phase until all the sites deploy their own
  - It should be the same "shoveler" that will run in each site

- Is rabbitMQ used only for data buffering (read/write)?
  - I.e: No any transformation using internal MQ functionality
  - Otherwise a MQ agnostic implementation might not be possible

- Could shoveler/monitoring collector talk Stomp?
  - Will facilitate to use different MQ from Rabbit (CERN uses ActiveMQ)

- Do we require XrootD transfers messages for WLCG monitoring?
  - OSG to CERN ActiveMQ may only need to send Site summaries
    - Directly from GRAC?

Possible simplification

Assumptions:
- Shoveler can be run "as a service"
- XrootD transfer doc is not required
- Site summary has a common format
- GRACC can write to AMQ
- Monalisa can write to AMQ

Advantages:
- Size/Rate of transoceanic messages reduced
- Easy to integrate other reporting tools (Monalisa, Dcache...)

Disadvantages:
- No single transfer information in MONIT